Clostridium difficile (CDI)

Consult Infectious Diseases in cases of severe, complicated, or multiple recurrent CDI.

EMPIRIC CHOICE

Step 1: Stop any unnecessary antimicrobials.
Step 2: Empirc antimicrobial selection depends on severity of infection (Table 1).

<table>
<thead>
<tr>
<th>Clinical Definition</th>
<th>Supportive Clinical Data</th>
<th>Recommended Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial episode; mild/moderate</td>
<td>No features of severe CDI.</td>
<td>Metronidazole 500 mg PO TID x 14 days (alternatively 250 mg PO QID if intolerance to metronidazole).</td>
</tr>
<tr>
<td>Initial episode; severe</td>
<td>White blood cell count ≥ 15, or Serum creatinine ≥ 1.5x premorbid level</td>
<td>Vancomycin 125 mg PO QID x 14 days.</td>
</tr>
<tr>
<td>Initial episode; severe or complicated</td>
<td>Hypotension or shock, ileus, megacolon</td>
<td>Vancomycin 125 mg PO/NG QID PLUS metronidazole 500 mg IV q8h. If complete ileus, consider adding intra-colonic vancomycin – suggest ID and General Surgery consultation</td>
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<tr>
<td>First recurrence</td>
<td></td>
<td>Same as initial episode, mild/moderate#</td>
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<tr>
<td>Second recurrence</td>
<td></td>
<td>Vancomycin 125 mg PO QID followed by tapered or pulsed regimen</td>
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</tbody>
</table>

Table 1. Recommendations for the Treatment of CDI (Adapted from Table 3 Infection Control & Hospital Epi. May 2010;31(5)).

- Early surgical intervention is key. Intracolonic vancomycin is to be considered last line adjunctive therapy only.
- Solution is supplied by pharmacy as 5 grams in 100 mL amber plastic or glass bottle (Final concentration of 500 mg per 10 mL). Each dose of 500 mg = 10 mL must be further diluted as instructed in the administration section. See UHN Nursing administration policy for intra colonic vancomycin.
- Consider referral to fecal transplant study.
- Some experts prefer vancomycin, but the choice to do so must also consider the high cost of the drug (especially to those being discharged from the hospital) and the lack of evidence supporting vancomycin over metronidazole in this setting.

DURATION

- 14 days of therapy is almost always adequate; however, longer durations may be required for severe or recurrent infection. This decision should be made in consultation with ID.

ALTERNATIVES FOR ALLERGIES

- Consult ID.

IMMUNOCOMPROMISED HOST CONSIDERATION

- Except for instances of febrile neutropenia, treatment of CDI in immunocompromised hosts is not automatically considered “complicated.” Patients should be assessed on a case-by-case basis considering risk factors and disease severity. Consult ID.

ADDITIONAL DIAGNOSTIC AND THERAPEUTIC COMMENTS

- Early surgical intervention should be considered in cases of severe CDI.
- There is no evidence to support test for cure by repeating C. difficile testing. Spores may remain for some time and consequently C. difficile test may remain positive 6-8 weeks or longer in some cases.
- Avoid anti-peristaltic agents.
- Avoid proton pump inhibitors unless indicated.
- There is no evidence to support long term antimicrobial prophylaxis for CDI.

References:


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